Check and foot valves

Art. 5075-5076-5077



100% MADE IN ITALY

Function

Pintossi + C check valves can be used for many applications such as sanitary water systems, heating systems, for industrial and agricultural applications.
The main function is to avoid the return of the fluid under pressure through the action of **an internal shutter completely made of brass (art.5075) or polymer (art.5076).**
The strength of the body and the shutter allow the valve to resist **very high pressures**.
The valve is suitable for use with drinking water and complies with the regulations of D.M. 174/2004.
Yellow finishing.

Product range

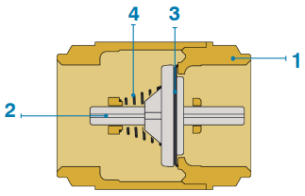
Art.5075	Check valve with metal obturator
Art.5076	Check valve with polymer obturator
Art.5077	Stainless steel filter for foot valve

Technical specifications

Fluids:	Water or glycol solutions
Max. glycol:	30%
Max. working temp.:	100°C
Opening pressure:	0,02 bar
Max. working pressure (art.5075):	50 bar (1/2" – 1")
	35 bar (1 ¼" – 2")
	12 bar (2 ½" – 4")
Max. working pressure (art.5076):	16 bar (1/2" – 1")
	10 bar (1 ¼" – 2")

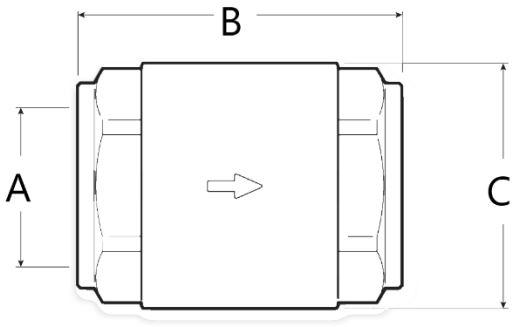
Materials

Body:	Brass CW617N
Shutter (art.5075):	Brass CW614N (1/2″)
	Brass CW617N (3/4″ – 4″)
Shutter (art.5076):	Polymer
Spring:	Stainless steel AISI 302
Gasket:	NBR

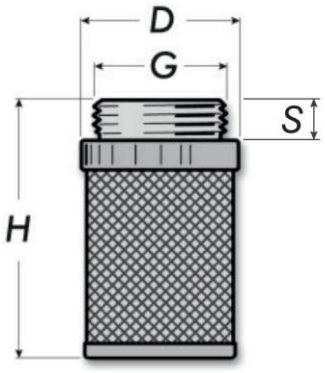


Dimensions

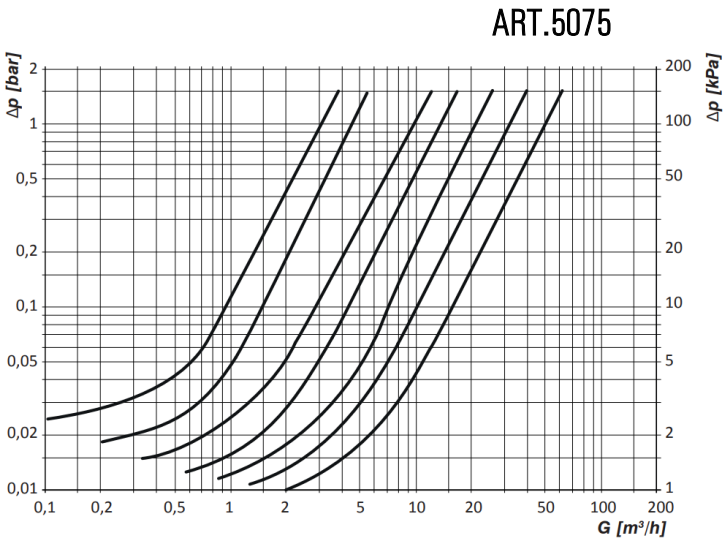
	ART.5075		ART.5076	
A	B	C	B	C
1/2″	58	32	30	48
3/4''	65	39	37	53
1″	75	47	44	59
1 ¼″	80	60	56	66
1 ½″	85	67	63	71
2″	94	83	78	80
2 ½″	104	93		
3″	121	104		
4″	156	119		



ART. 5077			
G	H	S	D
1/2″	50,5	8	26
3/4''	58	9	32
1″	63	10	41
1 ¼″	69	11	49
1 ½″	79	11	55
2″	96,5	12	67

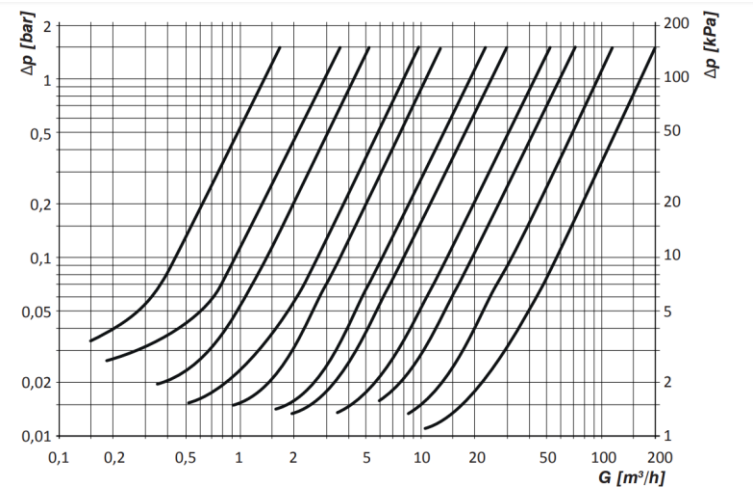


Head loss diagram



MISURA	Kv [m³/h]
1/2″	5,5
3/4''	14
1″	17
1 ¼″	26
1 ½″	40
2″	62
2 ½″	71
3″	120
4″	200

ART.5076

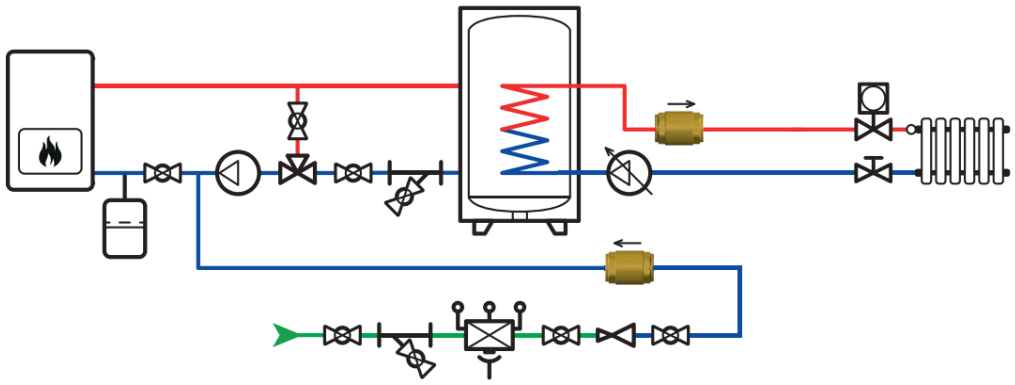


MISURA	Kv [m³/h]
1/2″	4
3/4''	8
1″	10,3
1 ¼″	18
1 ½″	24
2″	40

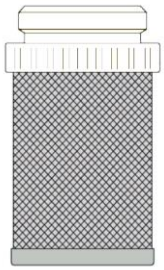
Installation

Check valves are one-way devices that can be installed in any position, respecting the flow direction marked by an arrow on the valve body.
Their assembly must be carried out in accordance with normal hydraulic practices, avoiding the excessive use of sealing materials such as hemp or PTFE in order to prevent a possible malfunctioning.
It is recommended to install a shut-off valve upstream and possibly a filter for impurities collection that could be collected in the metal-NBR internal sealing zone. For the same reason before the installation, it is recommended to carry out a cleaning of the system to remove burrs and dirt.

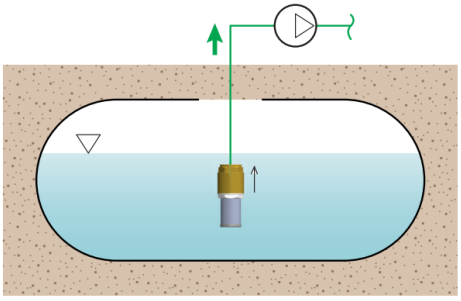
Example of check valves installation in a closed circuit



Stainless steel filter



Check valves can be turned in a foot valve using stainless steel filter art. 5077.
These strainers allow the fluid filtration in which it is immersed. For this reason they are particulary suitable to be used in water suction systems from wells or storage and in general hydraulic systems.
The filter can be used in every position, respecting the arrow direction marked on the check valve.
To avoid quick filter blockages and excessive efforts for the upper booster pumps, it is recommended to place the valve at least 5cm away from walls.
Besides it is recommed to check regurarly the state of cleanliness of the filtering mesh, to guarantee a correct flow to the user.



Maintenance

The valve should be checked periodically to make sure it is working properly.
In case of leakages at the seal zone due to foreign bodies, the valve must be removed to clean the area with compressed air or mechanically. Replace the valve if necessary.

Fluid characteristics

Reference standard for water treatments in heating systems is Norm UNI 8065:2019 which regulates the parameters that must be observed to avoid scale and corrosion phenomena.
In order to grant product warranty, the fluid characteristics must comply with the rules in force in the country of relevance or at least present features not less to the ones prescribed by the Norm UNI 8065:2019.
In particular, minimum standards necessary but not sufficient to control are the following:

Fluid aspect:	Limpid
PH:	Between 7 and 8
Iron (FE):	< 0,5 mg/kg (< 0,1 mg/kg for steam)
Copper (CU):	< 0,1 mg/kg (< 0,05 mg/kg for steam)
Antifreeze:	Passiveted Propylene Glycol
Conditioning:	As indicated by the producer

In any case when using antifreeze and conditioning solutions, is required to control and verify the correct compatibility between these substances and the construction materials stated in Pintossi+C technical datasheet.